

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2167	(257/506,510,524).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2007/01/18 19:07
L2	4015	257/e21.546-e21.55.ccls.	US-PGPUB; USPAT; EPO; JPO	AND	OFF	2007/01/18 19:07
L3	3444	257/e21.546-e21.55.ccls. and trench	US-PGPUB; USPAT; EPO; JPO	AND	OFF	2007/01/18 19:07
L4	3236	257/e21.546-e21.55.ccls. and trench and isolation	US-PGPUB; USPAT; EPO; JPO	AND	OFF	2007/01/18 19:07
S1	1	("5697953").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/03/13 11:32
S2	63	tapered adj trench and semiconductor	USPAT; EPO; JPO	OR	OFF	2004/02/02 16:02
S3	12	("4301588"   "4680614"   "4789885"   "4863877"   "4871685"   "4907063"   "4980747"   "4999312"   "5045904"   "5265504"   "5789769"   "6251739"   "2001/0021559").PN.	USPAT	OR	OFF	2003/04/02 16:22
S4	12	("4301588"   "4680614"   "4789885"   "4863877"   "4871685"   "4907063"   "4980747"   "4999312"   "5045904"   "5265504"   "5789769"   "6251739"   "2001/0021559").PN.	USPAT	OR	OFF	2003/04/02 16:22
S5	14	("4301588"   "4381953"   "4433471"   "4472873"   "4734382"   "4789885"   "4800171"   "4816423"   "4866001"   "4980747"   "5001073"   "5098852"   "5266504"   "5648279").PN.	USPAT	OR	OFF	2003/04/02 16:22
S6	5	("5918131"   "5950090"   "6093600"   "6107159"   "6121110").PN.	USPAT	OR	OFF	2003/04/02 16:24
S7	19	("4261762"   "4457359"   "4508161"   "4533430"   "4855017"   "4903754"   "4949783"   "4963713"   "5001423"   "5093579"   "5155331"   "5191218"   "5203958"   "5267607"   "5270266"   "5290381"   "5320982"   "5366002"   "5458734").PN.	USPAT	OR	OFF	2003/04/02 16:30
S8	5	("4579623"   "4604162"   "4729815"   "4855017"   "4992136").PN.	USPAT	OR	OFF	2003/04/02 16:31

## EAST Search History

S9	6	("3412295"   "4484979"   "4495025"   "4529475"   "4534826"   "4578128").PN.	USPAT	OR	OFF	2003/04/02 16:31
S10	6	("4508161"   "4565601"   "4609037"   "4771730"   "4931135"   "5078851").PN.	USPAT	OR	OFF	2003/04/02 16:33
S11	2	("4104086"   "4635090").PN.	USPAT	OR	OFF	2003/04/02 16:35
S12	6	("3900350"   "3980508"   "4104086"   "4104090"   "4240095"   "4309716").PN.	USPAT	OR	OFF	2003/04/02 16:36
S13	3240	trench.ti.	USPAT; EPO; JPO	OR	OFF	2003/04/02 16:43
S14	3240	trench.ti.	USPAT; EPO; JPO	OR	OFF	2003/04/02 16:45
S15	765	trench.ti. and (shallow with isolation) and semiconductor	USPAT; EPO; JPO	OR	OFF	2003/04/03 10:23
S16	2	("4255207"   "4269636").PN.	USPAT	OR	OFF	2003/04/02 16:49
S17	12	("4683637"   "4700454"   "5212397"   "5445989"   "5733813"   "5783476"   "5940718"   "5976952"   "6066530"   "6146973"   "6245639"   "6284626").PN.	USPAT	OR	OFF	2003/04/02 16:50
S18	16	("4452645"   "4662062"   "4710241"   "4713355"   "4745087"   "5055419"   "5444004"   "5580798"   "5643809"   "5679587"   "5688702"   "5698459"   "5759902"   "5895249"   "5942783"   "5976940").PN.	USPAT	OR	OFF	2003/04/02 16:53
S19	9	("5447884"   "5502006"   "5716890"   "5726090"   "6100163"   "6180490"   "6184091"   "6197658"   "6197677").PN.	USPAT	OR	OFF	2003/04/02 16:57
S20	37	("4156939"   "4472240"   "4495025"   "4579812"   "5013680"   "5047117"   "5057450"   "5097381"   "5122848"   "5177028"   "5208177"   "5229316"   "5241496"   "5250450"   "5275965"   "5292683"   "5346584"   "5358884"   "5358894"   "5376817"   "5387534"   "5393683"   "5397908"   "5416348"   "5420061"   "5424569"   "5433794"   "5438016"   "5492853"   "5498566"   "5508215"   "5536675"   "5573837"   "5596213"   "5629230"   "5696022"   "6020230").PN.	USPAT	OR	OFF	2003/04/02 17:00

## EAST Search History

S21	14	("4855017"   "5203957"   "5534452"   "5605600"   "5705429"   "5746884"   "5801083"   "5883002"   "5933749"   "5940731"   "6040231"   "6043135"   "6051478"   "6051479").PN.	USPAT	OR	OFF	2003/04/02 17:04
S22	7	("4534824"   "5598019"   "5780340"   "5780353"   "5858857"   "6001707"   "6008129").PN.	USPAT	OR	OFF	2003/04/02 17:08
S23	3	("4855017"   "5746884"   "5801083").PN.	USPAT	OR	OFF	2003/04/02 17:12
S24	195	non-carrier	USPAT; EPO; JPO	OR	OFF	2003/04/03 10:23
S25	9	(non-carrier) and electrons	USPAT; EPO; JPO	OR	OFF	2003/04/03 10:29
S26	23	(non-carrier) and semiconductor	USPAT; EPO; JPO	OR	OFF	2003/04/03 12:08
S27	1	("5287169").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/04/03 12:08
S28	1	("4472240").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/04/03 17:43
S29	1	("6274457").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/04/03 17:43
S30	1	("6034409").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/04/04 10:04
S31	16433	hayakawa.in.	USPAT; EPO; JPO	OR	OFF	2003/04/04 10:04
S32	96	hayakawa.in. and finger	USPAT; EPO; JPO	OR	OFF	2003/04/04 10:05
S33	5	hayakawa.in. and finger and sony	USPAT; EPO; JPO	OR	OFF	2003/04/04 10:08
S34	269	257/510.ccls. and trench and isolation	USPAT; EPO; JPO	OR	OFF	2003/08/11 16:08
S35	3	("5128743"   "5966615"   "6130467").PN.	USPAT	OR	OFF	2003/08/11 15:32

## EAST Search History

S36	21	("4227098"   "4390790"   "4612408"   "4690729"   "4755697"   "4777387"   "4912335"   "4916572"   "4924344"   "4963951"   "4996577"   "5032529"   "5084130"   "5176789"   "5342808"   "5459099"   "5474949"   "5512774"   "5549762"   "5658472"   "5886374").PN.	USPAT	OR	OFF	2003/08/11 15:34
S37	11	("4472240"   "5298450"   "5358891"   "5385861"   "5387540"   "5411913"   "5433794"   "5474953"   "5536675"   "5576241"   "5763315").PN.	USPAT	OR	OFF	2003/08/11 15:35
S38	8	("4213818"   "4631803"   "4662977"   "4666556"   "4853344"   "4876214"   "4965217"   "5118384").PN.	USPAT	OR	OFF	2003/08/11 15:37
S39	1	("5939765").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/08/11 16:11
S40	1	("6242788").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/08/11 16:23
S41	1	("4472240").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/08/11 17:29
S42	1	("6335224").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/08/12 12:19
S43	35	injecting with doping with impurity	USPAT; EPO; JPO	OR	OFF	2003/08/12 12:37
S44	1	("6084796").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/08/12 12:37
S45	0	("3363239"   "3482217").PN.	USPAT	OR	OFF	2003/08/12 12:37
S46	2	("3363239"   "3482217").PN.	USPAT	OR	OFF	2003/08/12 12:37
S47	4	"6084796".URPN.	USPAT	OR	OFF	2003/08/12 12:37
S48	0	ldd with "not" with current	USPAT; EPO; JPO	OR	OFF	2003/08/13 15:20
S49	0	(lightly adj doped adj region) with "not" with current	USPAT; EPO; JPO	OR	OFF	2003/08/13 15:20
S50	3	(lightly adj doped adj region) with "no" with current	USPAT; EPO; JPO	OR	OFF	2003/08/14 10:01
S51	0	"10151794".ccls.	USPAT; EPO; JPO	OR	OFF	2003/08/14 10:01

## EAST Search History

S52	0	"00151794".ccls.	USPAT; EPO; JPO	OR	OFF	2003/08/14 10:01
S53	0	"10051794".ccls.	USPAT; EPO; JPO	OR	OFF	2003/08/14 10:02
S54	1	genriyou.in. and semiconductor	USPAT; EPO; JPO	OR	OFF	2003/08/14 10:02
S55	2	genriyou.in. and chip	USPAT; EPO; JPO	OR	OFF	2003/08/14 17:57
S56	1	("5963838").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2003/08/14 17:57
S57	1	("6242788").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:40
S58	1	("5138743").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:40
S59	1	("5128743").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:41
S60	1	("6365952").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:43
S61	1	("6274457").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:44
S62	1	("6387776").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:44
S63	1	("6461934").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:45
S64	1	("4533430").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/02/02 15:45
S65	1	"62252139"	USPAT; EPO; JPO	OR	OFF	2004/02/02 15:50
S66	23	okabe.in. and trench	USPAT; EPO; JPO	OR	OFF	2004/02/02 16:01
S67	1	"09074132"	USPAT; EPO; JPO	OR	OFF	2004/02/02 16:02
S68	148	taper with trench and semiconductor	USPAT; EPO; JPO	OR	OFF	2004/02/02 16:23
S69	7	("4649625"   "5182224"   "5309008"   "5434109"   "5521114"   "5658816"   "5677219").PN.	USPAT	OR	OFF	2004/02/02 16:15

## EAST Search History

S70	58	(isolation adj trench).ti. and semiconductor	USPAT; EPO; JPO	OR	OFF	2004/02/02 16:23
S71	1519	(isolation with trench) and semiconductor and trench.ti.	USPAT; EPO; JPO	OR	OFF	2004/03/08 13:40
S72	9681	(isolation with trench) and semiconductor	USPAT; EPO; JPO	OR	OFF	2004/03/08 13:42
S73	5	("5223447"   "6080638"   "6103592"   "6150686"   "6228745").PN.	USPAT	OR	OFF	2004/03/08 13:43
S74	5	("4686552"   "4994409"   "5010379"   "5041887"   "5047815").PN.	USPAT	OR	OFF	2004/03/08 13:46
S75	5	("4686552"   "4994409"   "5010379"   "5041887"   "5047815").PN.	USPAT	OR	OFF	2004/03/08 16:44
S76	13	"5223447".URPN.	USPAT	OR	OFF	2005/01/21 10:10
S77	0	("20030089963").PN.	USPAT; USOCR; EPO; JPO	OR	OFF	2004/03/11 12:38
S78	1	("20030089963").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2004/03/12 13:32
S79	1	("3881244").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2004/03/12 14:12
S80	1	"06120036".pn.	USPAT; EPO; JPO	OR	OFF	2004/03/13 11:31
S81	1	"62252139".pn.	USPAT; EPO; JPO	OR	OFF	2005/01/20 10:25
S82	1	("5288944").PN.	USPAT; EPO; JPO	OR	OFF	2005/01/20 14:55
S83	0	(melting adj point) with cyclohexyldiepoxide	USPAT; EPO; JPO	OR	OFF	2005/01/20 14:56
S84	6	cyclohexyldiepoxide	USPAT; EPO; JPO	OR	OFF	2005/01/20 14:56
S85	0	cyclohexyldiepoxide same melt	USPAT; EPO; JPO	OR	OFF	2005/01/20 14:56
S86	926	(melting adj point) with epoxy adj resin	USPAT; EPO; JPO	OR	OFF	2005/01/20 15:17
S87	6	hysol adj fp0045	USPAT; EPO; JPO	OR	OFF	2005/01/20 15:42
S88	1	("5288944").PN.	USPAT; EPO; JPO	OR	OFF	2005/01/20 15:52
S89	0	"20030227066".pn.	USPAT; EPO; JPO	OR	OFF	2005/01/20 15:52

## EAST Search History

S90	1	"20030227066".pn.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/01/20 15:52
S91	1	"20040211976".pn.	US-PGPUB; USPAT	OR	OFF	2005/08/09 10:15
S92	1	("5192987").PN.	USPAT; EPO; JPO	OR	OFF	2005/01/21 10:28
S93	1	"20020056886" .pn.	US-PGPUB; USPAT	OR	OFF	2005/08/09 10:15
S94	1925	(257/506,510,524).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/08/17 17:52
S95	937	257/506,510,524.ccls. and trench	US-PGPUB; USPAT; EPO; JPO	AND	OFF	2005/08/17 17:54
S96	11	("20020031896"   "4472240"   "4495025"   "5895253"   "6034409"   "6137152"   "6165871"   "6175144"   "6177317"   "6207532"   "6242788").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2005/08/17 18:00
S97	2108	isolation adj trench	USPAT; EPO; JPO	OR	OFF	2006/01/30 17:22
S98	74	(isolation adj trench).ti.	USPAT; EPO; JPO	OR	OFF	2006/01/30 17:23
S99	5	("5177576"   "5629226"   "6015985"   "6232202"   "6238996").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:25
S10 0	14	("4855017"   "5203957"   "5534452"   "5605600"   "5705429"   "5746884"   "5801083"   "5883002"   "5933749"   "5940731"   "6040231"   "6043135"   "6051478"   "6051479").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:29
S10 1	3	("4857477"   "5674775"   "5795811").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:29
S10 2	2	("5578518"   "5910018").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:30
S10 3	3	("5468676"   "5646052"   "5731221").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:32
S10 4	24	("5910018").URPN.	USPAT	AND	OFF	2006/01/30 17:32

## EAST Search History

S10 5	25	("20020151143"   "20030027404"   "5578518"   "5712185"   "5766823"   "5868870"   "5910018"   "5940716"   "6010947"   "6027982"   "6066544"   "6080637"   "6117748"   "6153479"   "6165853"   "6169021"   "6191004"   "6214698"   "6284623"   "6313648"   "6355538"   "6372602"   "6716718"   "6723617"   "6734082").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:33
S10 6	15	("5020283"   "5478438"   "5494853"   "5578518"   "5668401"   "5702985"   "5719446"   "5780346"   "5795823"   "5814557"   "5821169"   "5827781"   "5933758"   "5935762"   "5962921").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/30 17:44
S10 7	2000	(257/506,510,524).CCLS.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/01/30 17:44
S10 8	12	("4666556"   "4745081"   "4758531"   "4873205"   "4980747"   "5003365"   "5065217"   "5105253"   "5130268"   "5217920"   "5436190"   "5465003").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 12:31
S10 9	12	("4666556"   "4745081"   "4758531"   "4873205"   "4980747"   "5003365"   "5065217"   "5105253"   "5130268"   "5217920"   "5436190"   "5465003").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 12:34
S11 0	4	("4507158"   "4509249"   "4547793"   "4666556").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 12:35
S11 1	4	("5065217").URPN.	USPAT	AND	OFF	2006/01/31 12:35
S11 2	12	("4666556"   "4745081"   "4758531"   "4873205"   "4980747"   "5003365"   "5065217"   "5105253"   "5130268"   "5217920"   "5436190"   "5465003").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 12:38
S11 3	18	("3725146"   "4106954"   "4683637"   "4875086"   "5017998"   "5065217"   "5137837"   "5223736"   "5364800"   "5485030"   "5494846"   "5548149"   "5616512"   "5702957"   "5733383"   "5874346"   "5880002").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 12:39
S11 4	2	("5702977"   "5780346").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 12:43



## EAST Search History

S11 5	4	("5395790"   "5643823"   "5786262"   "5926722").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:03
S11 6	395	bottle and trench and semiconductor	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:03
S11 7	203	bottle and trench and semiconductor and isolation	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:09
S11 8	1	("6828646").PN.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/01/31 13:10
S11 9	2	("6140207"   "6265754").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:10
S12 0	4	("4885261"   "5217919"   "5448102"   "5966598").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:11
S12 1	9	("5658816"   "6008103"   "6100132"   "6110792"   "6190988"   "6211006"   "6265485"   "6300211"   "6359300").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:19
S12 2	14	("4526631"   "4853076"   "5110759"   "5130885"   "5147819"   "5190889"   "5254873"   "5318923"   "5665659"   "5677219"   "5897370"   "5994718"   "6080618"   "6194755").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:21
S12 3	6	("4649625"   "5336912"   "5395786"   "5658816"   "5692281"   "5943581").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:22
S12 4	11	("4397075"   "4853348"   "4952524"   "5112771"   "5176789"   "5256592"   "5316979"   "5336912"   "5360758"   "5449630"   "5466625").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:23
S12 5	10	("4417914"   "4571819"   "4630343"   "4630356"   "4631803"   "4671970"   "4692992"   "4740480"   "4791073"   "4824797").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 13:33
S12 6	21	("5190889").URPN.	USPAT	AND	OFF	2006/01/31 13:33
S12 7	2	("6150670"   "6362040").PN.	US-PGPUB; USPAT; USOCR	AND	OFF	2006/01/31 15:05
S12 8	1	("5910018").PN.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/01/31 15:05

## EAST Search History

S12 9	1	("5910018").PN.	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2006/06/01 13:01
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